

1 process. These issues were not known by Sprint at the time that we withdrew our  
2 arbitration request in Oklahoma. Sprint and SWBT are continuing to negotiate  
3 these two disputed issues which Sprint believes are contrary to operational parity.  
4

5 **Q. Does Sprint's interconnection agreement with SWBT allow Sprint to**  
6 **compete in the local markets in SWBT's territory?**

7 **A.** This question has two components. The first has to do with whether SWBT has  
8 priced their services to Sprint in a manner that will allow Sprint's services to be  
9 price competitive.  
10

11 Sprint does not believe that the Agreement contains service pricing (wholesale,  
12 unbundled, interconnection, or otherwise) that will allow Sprint to effectively  
13 price compete with SWBT for the same local customers. However, in the interest  
14 of spending less time on talking and more time on getting operationally ready,  
15 Sprint agreed to the prices contained in the Agreement with the understanding that  
16 the prices are all interim and will change significantly in SWBT's upcoming  
17 generic cost proceeding in Oklahoma. Additionally, Sprint allowed certain  
18 unfavorable terms and conditions to be listed in the Agreement with the  
19 understanding that Sprint can request revision of these should SWBT agree to  
20 more favorable terms and conditions with other CLECs in the future.  
21

22 The second competitive positioning component of the Agreement is whether the  
23 Agreement will allow Sprint to attain operational parity with SWBT in order for

1 Sprint to effectively compete from a local service provisioning and maintenance  
2 perspective. With the exception of the items previously mentioned, I believe that  
3 Sprint's Agreement with SWBT is the beginning framework for obtaining  
4 services from SWBT that are provided in a manner that is at parity with how  
5 SWBT provides the services to themselves and others.

6  
7 **Q. Does having an agreement for SWBT to provide the framework for**  
8 **operational parity ensure that operational parity with SWBT can be**  
9 **attained?**

10 A. No, it does not. The Sprint and SWBT steps to go from our contractual agreement  
11 to operational readiness are many and complex. This complexity is heightened  
12 when eventually Sprint moves from resold services to unbundled services and  
13 interconnection services and new processes and interfaces between Sprint and  
14 SWBT must be implemented. The Agreement is merely the first step in defining  
15 customer requirements. The next steps that require SWBT cooperation for  
16 implementing Sprint operational readiness for just the resold service aspect  
17 include:

- 18 • designing the interfaces and processes to meet the customer  
19 requirements,
- 20 • building the interfaces and processes as designed and establishing  
21 network connectivity,
- 22 • Alpha testing all interfaces and processes under stress conditions to  
23 simulate what will happen when large volumes and various types of

1 end user customers begin using Sprint's local services (which utilize  
2 SWBT's underlying services),

- 3 • correcting problems identified in Alpha testing,
- 4 • Beta testing how the systems work under stress conditions with a
- 5 select number of "friendly" customers, and
- 6 • correcting problems identified in Beta testing prior to market launch.

7

8 Furthermore, local service operations have many functional components that  
9 require specific interfaces and processes between Sprint and SWBT. Using broad  
10 categorizations, these functional components are:

- 11 • pre-order information gathering while the customer is on-line to
- 12 determine the customer's existing services and address verification,
- 13 availability of new services, telephone number assignment,
- 14 appointment scheduling for on-site installation and whether one is
- 15 needed.
- 16 • placing orders for resold services and unbundled network elements,
- 17 including, directory listings and establishment of directory assistance,
- 18 operator assistance, and 911 services,
- 19 • obtaining provisioning information feedback (for example, order and
- 20 due date confirmation, order completion status, order jeopardy status),
- 21 • maintenance and repair, including testing, monitoring of service
- 22 functionality, trouble-reporting, and repair status determination,

- 1                   • obtaining CLEC call detail records for billing purposes, including,
- 2                   recording usage in detail that CLECs for billing end users and in the
- 3                   case of interconnection, other local exchange carriers.
- 4                   • obtaining invoices of ILEC charges for proper validation of charges
- 5                   and remittance.

6           Each category must be dealt with separately and as a combination in the steps  
7           listed above.

8

9   **Q.    At what stage are Sprint and SWBT in operational readiness for Sprint local**  
10 **market entry in Oklahoma?**

11   A.   We are at the very beginning, designing the interfaces to SWBT's processes and  
12       operations support systems to meet our customer requirements as specified in the  
13       Agreement. While SWBT has offered several OSS interfaces for Sprint to place  
14       resold service orders; some of which appear to be the same which SWBT uses for  
15       their own orders, these interfaces have not been tested for CLEC services nor do  
16       they offer Sprint the ability to attain full operational parity with SWBT. I have  
17       outlined SWBT's interface options in Exhibit 1 to my testimony and discuss them  
18       in greater detail later in my testimony.

19

20 **Q.    What do you mean when you refer to operations support systems?**

21   A.   Operations support systems (OSS) are the mechanized processes and databases  
22       that provide the functionality and information needed to provide and maintain  
23       telecommunications services to end user customers. These functions, as

1           previously defined, include pre-ordering, ordering and provisioning, maintenance  
2           and repair, recording of usage detail, and billing.

3  
4   **Q.    What do you mean by OSS interfaces?**

5   A.    The OSS interfaces are the connections and integrated processes that allow for the  
6           requests for functionality and information to flow between the CLECs' operations  
7           support systems and the ILECs' operations support systems. These connections  
8           can be done through various methods. In SWBT's case, the planned interface  
9           methods include facsimile machines with manual intervention, a graphical user  
10          interface (GUI) to the operations support systems, a GUI interface to proprietary  
11          middleware that accesses the operations support systems, tape transmission  
12          (TTRAN), electronic data interchange (EDI), and electronic bonding. Of these  
13          methods, the only ones that have potential for full operational parity capability are  
14          EDI and electronic bonding. Neither EDI nor electronic bonding is operationally  
15          available today with SWBT.

16  
17   **Q.    What are the aspects of OSS interface that Sprint requires for operational**  
18          **parity?**

19   A.    The operations support system interfaces should have the following characteristics  
20          in order to be capable of offering Sprint operational parity:

21          1) provide access to the same content of information that SWBT uses to provide  
22             local service to SWBT end users;

- 1           2) provide access timing in the same manner with which SWBT can access the
- 2           interface and information; for example, real-time access versus batch versus
- 3           facsimile/manual;
- 4           3) provide access to information and feedback with no less priority than SWBT
- 5           has for that information and feedback for their end users' local service; for
- 6           example, CLEC phone numbers and installation appointment assignments
- 7           should utilize the same systems and obtain the same priority as those provided
- 8           for SWBT's end user local service orders;
- 9           4) are built to CLEC industry standards when set;
- 10          5) allow for full system flow-through potential with no manual intervention from
- 11          CLEC systems to ILEC systems to CLEC systems and so on;
- 12          6) have been fully designed to meet interface requirements;
- 13          7) have processes which have been fully documented for use by CLECs and
- 14          SWBT;
- 15          8) have been fully tested and accepted by CLECs for meeting interface
- 16          requirements under various stress conditions; such as, high volumes and bursts
- 17          of requests, multiple types of users;
- 18          9) are operational with significant CLEC activity to confirm ability to perform
- 19          and sustain operational parity requirements; and
- 20          10) are equally supported by SWBT in terms of documentation, help assistance,
- 21          maintenance, updates, and change notifications as the operations support
- 22          system interfaces which SWBT uses for providing local service to their own
- 23          end users.

1

2   **Q.    Why is it important to Sprint that SWBT's OSS interfaces for CLECs**  
3       **conform to industry standards whenever possible?**

4    A.   Today, Sprint is a global telecommunications service provider and as such must  
5       take advantage of the opportunity to become a nationwide local service provider  
6       in order to preserve and grow our existing long distance customer base. As a  
7       nationwide provider of local service, Sprint will potentially have to interface with  
8       every ILEC and possibly every other CLEC. There are currently seven RBOCs ,  
9       GTE, and over 1300 independent incumbent local exchange companies. Sprint  
10      will be significantly disadvantaged in a competitive local market from a time and  
11      cost perspective, if forced to develop numerous system interfaces and provide  
12      training for personnel to use the multitude of systems and processes. Likewise,  
13      the use of industry standards benefits the ILECs by virtue of having a standard set  
14      of CLEC customer requirements for operational interfaces.

15

16   **Q.    Why is it important to Sprint that OSS interfaces provide full system flow-**  
17       **through?**

18    A.   Without full system flow-through, Sprint's orders are either having to be re-keyed  
19       by SWBT representatives or re-keyed by Sprint's representatives after the initial  
20       order entry. The process of having to enter the same data more than once  
21       introduces several problems; such as, data entry errors, non-synchronized  
22       databases, and time delays. These types of problems can have serious negative

1 effects on customer service and other areas of Sprint's local service business and  
2 subsequent ability to compete in the local market.

3

4 **Q. What OSS interface methods does SWBT offer or plan to offer?**

5 A. Sprint recently met with SWBT to discuss OSS interfaces and was provided  
6 current information on the status of SWBT's operations support systems and  
7 interfaces for CLECs.

8

9 For obtaining pre-order information, SWBT offers a SWBT-developed GUI to  
10 SWBT's proprietary service order database, a GUI interface to SWBT middleware  
11 that accesses SWBT legacy systems, and planned access by an Electronic Data  
12 Interchange (EDI) based on yet-to-be-developed industry standards.

13

14 For resale orders, SWBT offers CLECs the options of placing orders by facsimile  
15 transmission with manual intervention to SWBT proprietary order systems, via a  
16 SWBT GUI to SWBT's proprietary order systems, or via yet-to-be-developed  
17 automated interfaces based on EDI version 7 industry standards. The only  
18 process offered for complex orders (20% of residential and 50% of business) are  
19 facsimile processes with manual input.

20

21 For unbundled network element and interconnection orders, SWBT offers  
22 facsimile processes with manual intervention and plans to build automated EDI



1 interfaces based on industry standards currently in development with the Ordering  
2 and Billing Forum (OBF).

3  
4 For directory listing orders, SWBT offers facsimile processes with manual  
5 intervention and plans on developing automated systems for simple directory  
6 orders based on EDI industry standards.

7  
8 For provisioning feedback, SWBT currently offers facsimile processes with  
9 manual intervention and plans to develop automated feedback processes per EDI  
10 version 7 standards.

11  
12 For maintenance and repair, testing of SWBT services and facilities, and trouble-  
13 reporting by CLECs, SWBT offers a GUI to a SWBT proprietary system which  
14 was developed prior to local competition for use by large retail customers.  
15 Additionally, SWBT offers electronic bonding based on industry standards.

16  
17 For providing CLEC call detail records, SWBT offers the information via  
18 Network Data Movers (NDM) in an industry standard format.

19  
20 For billing CLECs, SWBT plans on using the same system that they use for  
21 billing SWBT end users, CRIS, and will transmit these bills to CLECs via paper  
22 copy or tape transmission. To a much lesser degree, SWBT plans on using some  
23 of their other billing systems which are in place today; such as, IBIS. IBIS is the

1           billing system which SWBT uses for billing independent companies in traffic  
2           exchange situations today.

3  
4   **Q.    Do SWBT's current OSS interfaces meet Sprint's requirements?**

5   A.   No, they do not, although with SWBT's current incentive and desire to obtain  
6       interLATA relief, we believe that it is SWBT's intent to work with Sprint to meet  
7       these requirements. Exhibit 1 to this testimony summarizes Sprint's  
8       understanding of where SWBT stands with respect to each of Sprint's  
9       requirements for operational parity for each functional component of operational  
10      interface. As the Exhibit illustrates, there is no area of OSS interface functionality  
11      that meets Sprint's requirements for operational parity and in fact, the most  
12      optimistic date that operational parity with SWBT can be attained is probably late  
13      1998.

14  
15   **Q.    What are some of the major limiting factors for SWBT systems to provide**  
16       **operational parity for resold services?**

17   A.   Automated systems and interfaces for ordering resale services based on EDI  
18       version 7 industry standards need to be built. Industry standards for pre-order  
19       functions will most likely not be developed until 1998. SWBT can only test with  
20       one CLEC per quarter for implementation of electronic bonding for maintenance  
21       and repair. SWBT has not indicated to Sprint that any OSS interfaces processes  
22       are fully documented or tested (with the exception of facsimile). Finally, there is  
23       no way to confirm that operational parity can be attained until the OSS interfaces

1           that are designed to provide parity have been fully tested, implemented, and  
2           sustained. In the case of SWBT, none of the parity interfaces have been fully  
3           implemented.

4  
5   **Q.   Does SWBT have any automated systems for OSS interface for unbundled**  
6   **network element services?**

7   A.   Sprint is not aware of any SWBT systems for OSS interfaces that are currently  
8           designed, tested, or operational for CLECs to order, maintain, or accept billing for  
9           unbundled network elements from SWBT. SWBT is working with the industry  
10          Ordering and Billing Forum to develop the standards for these OSS interfaces.  
11          These interfaces are necessary for facilities-based competition to evolve.

12  
13   **Q.   Can local competition in Oklahoma exist without facilities-based local service**  
14   **providers?**

15   A.   I do not believe so. As long as CLECs are predominantly dependent on SWBT or  
16           other ILECs for the services and facilities that underlie the CLECs' local services  
17           (as a result of using ILEC resold services or unbundled network elements),  
18           competition will be stifled. A CLEC's ability to react to customer requirements  
19           and changing technology trends are severely encumbered when the CLEC's sole  
20           supplier, who is also a major competitor, has control of what services are  
21           available, when, and at what level of service quality. When using SWBT's resold  
22           services, it will be very difficult for Sprint or any other CLEC to differentiate

1 services in order to gain customer base from SWBT when SWBT possesses such  
2 competitive control.

3  
4 **Q. Is Sprint a facilities-based provider of local service in Oklahoma?**

5 A. No, but Sprint intends to be a facilities-based local service provider as soon as  
6 possible. When Sprint does enter the local market in Oklahoma, we will be first  
7 as a reseller of SWBT services with plans to transition to combinations of  
8 unbundled network elements with Sprint-owned facilities. Because Sprint plans  
9 on being a nationwide local service provider as opposed to a niche market  
10 provider, Sprint's facilities-based transition cannot economically occur until the  
11 Sprint local customer base grows and economies of scale are realized.

12  
13 **Q. Does Sprint have any other concerns regarding SWBT's cooperation in**  
14 **Sprint's efforts to bring local competition to the Oklahoma consumer?**

15 A. Yes. SWBT has not been timely in providing information that Sprint has  
16 requested and needs in order to become operationally ready. As previously stated,  
17 SWBT has not provided Sprint any process flow diagrams or documentation on  
18 operational interface processes and has provided very limited OSS interface  
19 specifications. Additionally, over two months ago, Sprint sent SWBT a request  
20 for information which Sprint needs now for market entry planning; such as street  
21 address guides, current directory close dates, service availability by switch, etc.  
22 With the exception of the white pages directory close dates which were provided  
23 just two weeks ago, SWBT has not provided the information requested and just

1 recently verbally provided Sprint with SWBT contact names for Sprint to call and  
2 request some of the information again. At no time has SWBT indicated that they  
3 consider any of Sprint's request to be unreasonable or countered with a request for  
4 additional information which they need from Sprint in order to respond. Sprint's  
5 current local market rollout schedule is extremely dependent on SWBT's  
6 responsiveness to these types of information requests. Furthermore, Sprint  
7 expects to continue to identify other areas of information that will be needed for  
8 Sprint's local service provisioning with SWBT resold services.

9  
10 As Sprint moves from resold services to unbundled network elements, the  
11 complexity of SWBT's service offerings increases from that associated with just  
12 resold services. Sprint's need for information from SWBT will increase with this  
13 increased complexity. When utilizing unbundled network elements, a CLEC's  
14 ability to compete will be dependent on understanding how the ILECs' unbundled  
15 service elements work individually and combined, as well as, what is available  
16 and planned for the future.

17  
18 It is particularly unclear even after completing an interconnection contract with  
19 SWBT as to what all of the potential SWBT-imposed charges are associated with  
20 unbundled network element services. SWBT has stated on numerous occasions  
21 that their draft contract with AT&T in Texas that was filed with the Texas Public  
22 Utility Commission does not include all of these charges. SWBT also said  
23 months ago that they would provide Sprint a list of these missing rate elements,

1 but have yet to do so. Planning to use unbundled network element services is  
2 nearly impossible when the complete list of elements required to provision the  
3 services and their associated costs are unknown. When Sprint asked for  
4 timeframe commitments on installation of unbundled network elements based on  
5 SWBT's own use of these elements in the provisioning of end user service today,  
6 SWBT would not provide any data because they do not sell unbundled network  
7 element service to SWBT end users. Thus the installation intervals which SWBT  
8 commits to provide are mostly listed as individual case basis (ICB) and in some  
9 cases 5-10 days, which appear competitively unacceptable. But then, SWBT has  
10 not provided sufficient information for Sprint to judge whether SWBT is  
11 providing these services and intervals non-discriminatorily.

12  
13 Of even more concern to Sprint than how SWBT is responding to reasonable  
14 information requests today, is how SWBT's responsiveness may worsen when  
15 SWBT's incentive for cooperation, interLATA relief, is realized.

16  
17 **Q. Are there other areas in which SWBT has failed to provide Sprint reasonable**  
18 **support to enter the local market competitively?**

19 **A. Yes. The areas include:**

20 SWBT will make no commitment on whether Sprint will have access to purchase  
21 under the Agreement any of SWBT's pending telecommunications product  
22 offerings or unbundled network enhancements that they plan on introducing in the

1 near-term or long-term; for example, Advanced Intelligent Network (AIN)  
2 triggers, Asymmetric Digital Subscriber Lines (ADSL), or ADSL modems.

3  
4 Neither SWBT nor Southwestern Bell Yellow Pages (SWBYPS) will work with  
5 Sprint to obtain for Sprint a service arrangement for yellow pages service at parity  
6 with what SWBT has with SWBYPS.

7

8 **Q. Will you please summarize your testimony?**

9 A. Sprint has an interconnection agreement with SWBT that would allow Sprint to  
10 enter the Oklahoma local market, but it is only the beginning framework for  
11 Sprint's local market entry and does not mean that local competition exists today  
12 in SWBT territory.

13

14 Though SWBT offers operations support system interfaces that could provide  
15 Sprint some aspects of operational parity, these interfaces do not yet offer Sprint  
16 the ability to attain full operational parity because of the lack of full, real-time  
17 flow-through to Sprint's systems on an industry standard basis. Furthermore,  
18 these interfaces and processes have not been documented, tested, or implemented  
19 to confirm what they offer.

20

21 Finally, local service competition will not happen in SWBT territory until the  
22 majority of consumers have viable choices for local service that are provided by  
23 local service providers that are not dependent on SWBT for facilities or services.

1

2   **Q.     Does this conclude your testimony?**

3   **A.     Yes, it does.**

4

5



**OPERATIONAL PARITY CAPABILITY OF  
SOUTHWESTERN BELL OPERATIONS SUPPORT SYSTEMS INTERFACES as of 3/3/97**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
FUNCTION	OPERATIONAL INTERFACE METHOD	PARITY ACCESS - CONTENT?	PARITY ACCESS - TIMING?	PARITY ACCESS - PRIORITY?	CLEC INDUSTRY STD.?	SYSTEM FLOW- THROUGH POTENTIAL?	FULLY DESIGNED?	PROCESS DOCU- MENTED?	STRESS TESTED?	OPERA- TIONAL?	SUPPORTED?
<b>Pre-Order Information</b>	SWBT GUI to Proprietary Systems	Yes	Yes	Yes	No	No	Yes, early stages	No	No	No	Unknown
	GUI to Proprietary Middleware	Yes	Yes	Yes	No	Yes	No	No	No	No	Unknown
	Electronic Bonding	TBD	TBD	TBD	TBD-1998	Yes	No	No	No	No	Unknown
<b>Resale Orders - Simple</b>	FAX	Yes	No	Yes	No	No	Yes	No	No	Yes, small scale	Unknown
	SWBT GUI to Proprietary Systems	Yes	Yes	Yes	No	No	No	No	No	No	Unknown
	EDI v.7	Yes	No	Yes	Yes	Yes	No	No	No	No	Unknown
<b>Resale Orders - Complex</b>	FAX	Yes	No	Yes	No	No	Yes	No	No	Yes, small scale	Unknown
<b>Unbundled Network Element Orders</b>	FAX	Unknown	Unknown	Unknown	No	No	No	No	No	Yes, small scale	Unknown
	EDI v.7	Unknown	Unknown	Unknown	Yes	Yes	No	No	No	No	Unknown

EDI = Electronic Data Interchange  
FAX = facsimile  
FOC = Firm Order Confirmation  
GUI = Graphical User Interface  
NDM = Network Data Mover  
N/A = not applicable  
TBD = to be determined  
TTRAN = tape transmission

**OPERATIONAL PARITY CAPABILITY OF  
SOUTHWESTERN BELL OPERATIONS SUPPORT SYSTEMS INTERFACES as of 3/3/97**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
FUNCTION	OPERATIONAL INTERFACE METHOD	PARITY ACCESS - CONTENT?	PARITY ACCESS - TIMING?	PARITY ACCESS - PRIORITY?	CLEC INDUSTRY STD.?	SYSTEM FLOW- THROUGH POTENTIAL?	FULLY DESIGNED?	PROCESS DOCU- MENTED?	STRESS TESTED?	OPERA- TIONAL?	SUPPORTED?
<b>Directory Orders - Simple</b>	FAX	Yes	No	Yes	No	No	Yes	No	No	Yes, small scale	Unknown
	EDI v.7	Yes	Yes	Yes	TBD	Yes	No	No	No	No	Unknown
<b>Directory Orders - Complex</b>	FAX/Manual	Unknown	No	Unknown	No	No	Unknown	No	No	Possibly, small scale	Unknown
<b>Provisioning Information (Feedback, FOCs, status, etc.)</b>	FAX	No	No	Yes	No	No	Yes	No	No	Yes, small scale	Unknown
	EDI v.7	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Unknown
<b>CLEC Maintenance and Repair</b>	GUI to Proprietary System	No	No	No	No	Unknown	Yes	No	No	No	Unknown
	Electronic Bonding	TBD	TBD	TBD	Yes	Yes	Some	No	Unknown	No	Unknown
<b>CLEC Call Detail Records</b>	EMR Format, Variable NDM	No	No	Unknown	Some	Yes	Yes	Yes	No	Some	Unknown
<b>Billing to CLEC</b>	CRIS via TTRAN	N/A	N/A	N/A	No	No	Yes	Yes	No	Some	Unknown

EDI = Electronic Data Interchange

FAX = facsimile

FOC = Firm Order Confirmation

GUI = Graphical User Interface

NDM = Network Data Mover

N/A - not applicable

TBD = to be determined

TTRAN =tape transmission

### COLUMN HEADING EXPLANATIONS

I	FUNCTION	the operational purpose which the interface facilitates achieving
II	OPERATIONAL INTERFACE METHOD	the type of interface used to retrieve, transmit, and receive information between Sprint and SWBT
III	PARITY ACCESS - CONTENT?	Does the interface method provide access to the same content of information that SWBT uses to provide local service to SWBT's end user?
IV	PARITY ACCESS - TIMING?	Does the interface method provide access timing at least equal to the timing with which SWBT can access the information and feedback from the operation support systems interface and information; for example, real-time access versus batch versus facsimile?
V	PARITY ACCESS - PRIORITY	Does the interface method provide access to information/feedback with no less priority than SWBT uses for their end users' local service; for example, CLEC installation appointment assignments should utilize the same systems?
VI	CLEC INDUSTRY STANDARD?	Was the interface method built or is planned to be built to CLEC industry standard?
VII	SYSTEM FLOW- THROUGH POTENTIAL?	Do the interfaces allow for full system flow-through potential with no manual intervention from CLEC systems to ILEC systems to CLEC systems and so on?
VIII	FULLY DESIGNED?	Have the interface methods been fully designed to meet requirements?
IX	PROCESS DOCUMENTED?	Have interface processes been fully documented for use by CLECs and SWBT?
X	STRESS TESTED?	Have the interfaces been fully tested with CLECs for meeting CLEC operational requirements under various stress conditions; such as, high volumes and bursts of requests, multiple types of users?
XI	OPERATIONAL?	Are the interface methods operational with significant CLEC activity to confirm the ability to perform and sustain operational parity requirements?
XII	SUPPORTED?	Are the interface methods equally supported by SWBT in terms of documentation, help assistance, maintenance, and updates as the operational interfaces and support systems which SWBT uses for providing local service to its end users?